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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,038	05/11/2001	Yukihiro Watanabe	P100725-00040	5084

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EXAMINER

BINDA, GREGORY JOHN

ART UNIT

PAPER NUMBER

3679

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/853,038

Applicant(s)
Watanabe et al

Examiner
Greg Binda

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jun 11, 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above, claim(s) 8-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on May 11, 2001 is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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Election/Restriction

1. Applicant's election without traverse of Species I (Figs. 1-4) in Paper No. 6 is acknowledged.
2. Claims 8-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 6.

Drawings

3. The drawings are objected to under:
 - ✓ a. 37 CFR 1.84(h)(5) because Figure 4 show(s) modified forms of construction in the same view. See page 24, lines 10 & 11.
 - b. 37 CFR 1.84(p)(5) because:
 - i. Reference characters 'r,' 'T,' and theta appear in Figs. 5A & 5B but are not mentioned in the specification. Reference character 'r' also appears in Fig. 1.
 - ii. Reference character 'R' appears in Figs. 1, 5A & 5B and though it is mentioned in the specification on pages 3 & 17, it is still not clear what feature the reference character is meant to identify.

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✓ 4. Figures 5A & 5B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated per page 2, lines 1-6. See MPEP § 608.02(g).

5. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

6. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

✓ 7. The abstract of the disclosure is objected to for including improper content. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure

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of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

8. The disclosure is objected to because:

- a. The term, "contact ratio" appears on page 2, line 5 and page 21, line 15, but the dimensions that define said ratio are not disclosed.
- b. An undefined acronym, NVH, appears on page 4.

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c. On page 10, lines 7 & 8 essential material is incorporated by reference to a publication. The incorporation of essential material in the specification by reference to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

9. The specification is objected to as failing to comply with 37 CFR 1.71 and 1.75(d)(1) because the detailed description fails to provide proper antecedent basis for the following claimed subject matter:

a. Claim 1, lines 13-16, “the contact ellipse . . . does not deviate from the end surface of said roller”.

b. Claim 2, lines 3 & 4, “the contact surface pressure produced on said roller”

Claim Objections

10. The claims are objected to as failing to comply with 37 CFR 1.75(i) because elements of the claims are not separated by line indentation.

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Claim Rejections - 35 U.S.C. § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

a. Claim 1, lines 11 & 12 recites the limitation, “contact ratio is 1.01 or above” but the the dimensions that define said ratio are never recited or described. Therefore undue experimentation would be required to make and/or use the claimed invention because it would take undue experimentation to determine the dimensions that define “contact ratio”. See also claim 3 where a particular range of values for “contact ratio” is recited.

b. Claim 2 recites that surface pressure on the rollers is set so as not to exceed the surface pressure between the trunnions and needles. In the disclosure, the only way to accomplish this feature is by making the “contact ratio” within a certain range (see page 22, lines 1-4). Therefore the feature is not enabled by the disclosure, because the means for making “contact ratio” within a certain range is not enabled (see item ‘a’ immediately above).

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 1, lines 11 & 12 recites the limitation, "contact ratio" but the dimensions that define said ratio are not recited in the claims are described in the specification. Therefore it is not possible to determine "contact ratio" for a given universal joint.

b. Claim 1, lines 13 & 14 recites the limitation, "the contact ellipse produced in said roller". However, the only "contact ellipse" disclosed (see Fig. 1) is at least partially external to roller 30. Therefore it is not clear what constitutes an "contact ellipse" that is "in" a roller.

c. Claim 1, lines 13-16 recites the limitation, "the contact ellipse . . . does not deviate from the end surface of said roller". It is not clear how this "contact ellipse" would deviate from the end surface of a roller.

Claim Rejections - 35 U.S.C. § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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16. For the remainder of this action it is assumed that the term “contact ratio” as recited in the claims and the dimensions defining it are known to those skilled in the art of making tripod joints. This assumption is provided solely for the sake of providing the most complete action on the merits and in no way constitutes grounds for overcoming the 112 rejections in items 12 and 14 above.

17. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krude et al, US 5,376,050. In Fig. 1 Krude shows a tripod joint comprising all the limitations of the claims but does not expressly disclose contact ratio in the range of 1.02 to 1.2. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the contact ratio substantially between 1.02 and 1.2, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Killing*, 895 F.2d 1147, 14 USPQ2d 1056.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In Figs. 1 & 2, Asahara et al shows a tripod joint with most of the features of the claimed invention. In Fig. 4, Mizukoshi shows a tripod joint with most of the features of the claimed invention. In Fig. 1, Orain shows a tripod joint with most of the features of the claimed

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invention. In Figs. 1-3, Drevard et al shows a tripod joint with most of the features of the claimed invention. BRD shows a tripod joint with most of the features of the claimed invention.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (703) 305-2869. The examiner can normally be reached Tuesday through Friday from 9:30 am to 7:00 pm. The examiner can also be reached on alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne, can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 (before final), (703) 872-9327 (after final) and (703) 872-9325 (customer service).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.



Greg Binda
Patent Examiner